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Supreme Court, U.S.
FILED
JAN 19 1993
OFFICE OF THE CLERK

No. 92-102

IN THE
Supreme Court of the United States
OCTOBER TERM, 1992

WILLIAM DAUBERT and JOYCE DAUBERT, Individually and as Guardians Ad Litem for JASON DAUBERT, and ANITA DE YOUNG, Individually and as Guardian Ad Litem for ERIC SCHULLER,
Petitioners,

v.

MERRELL DOW PHARMACEUTICALS, INC.,
Respondent.

On Writ of Certiorari to the United States Court of Appeals for the Ninth Circuit

BRIEF OF THE CHAMBER OF COMMERCE OF THE UNITED STATES OF AMERICA AS AMICUS CURIAE SUPPORTING RESPONDENT

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BRIEF OF THE CHAMBER OF COMMERCE OF THE UNITED STATES OF AMERICA AS AMICUS CURIAE SUPPORTING RESPONDENT

INTEREST OF AMICUS CURIAE *

The Chamber of Commerce of the United States of America (the "Chamber"), a nonprofit corporation organized and existing under the laws of the District of Columbia, is the largest federation of business, trade, and professional organizations in the United States. It represents the interests of over 215,000 corporations, partnerships, and proprietorships, as well as state and local chambers of commerce and trade associations.

* Counsel for all parties have consented to the filing of this amicus brief. *Amicus* has filed those consents with the Clerk of this Court.

The problem of unreliable expert testimony presents grave concerns to the Chamber and its members. A tort system should be rationally designed to compensate injuries actually caused by tortious conduct; basing verdicts on unreliable expert testimony does not serve that goal. Lay juries often have a difficult time fully understanding or evaluating the nuances of competing scientific viewpoints, and are particularly unqualified to discard unreliable expert testimony which is admitted by the court. Because of this, a case which gets to a jury on the basis of unreliable expert testimony essentially gives that jury the option to follow its emotional impulse to "do justice" to the most sympathetic party. The Chamber believes that the result is a form of redistributive justice, largely divorced from the merits of the case. When the business community is taxed by verdicts in these otherwise-unsupportable cases, the effect is to deter the development and availability of goods and services that benefit the consumer.

The Chamber is filing this brief *amicus curiae* in support of respondent because it believes that the exclusion of unreliable scientific expert witness testimony from federal trials pursuant to the rule of *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923), is both important and required under the Federal Rules of Evidence. As we have noted, the exclusion of such unreliable testimony is important because its admission subverts the fairness of the trial process. The exclusion of such evidence is required because the *Frye* rule was the prevailing rule at the time the Federal Rules of Evidence were adopted, and there is no indication that the framers intended to abandon that rule. Even if adherence to *Frye* were not required, this Court should continue to follow the *Frye* rule as a matter of policy.

INTRODUCTION AND SUMMARY OF ARGUMENT

The Chamber and Petitioners agree that unreliable expert testimony must be excluded (*see, e.g.*, Pet. Br. 38) and that the courts cannot adopt exclusionary rules that

are not sanctioned by the Federal Rules. So too, while a number of rules have been interpreted to require the exclusion of unreliable expert testimony, the Chamber agrees that Rule 403 of the Federal Rules of Evidence imposes limits on such testimony. *See* Pet. Br. 38-39.

Thus, the issue in this case is not whether there are any limits on the admissibility of expert testimony. The issue is what those limits are. In deciding what those limits are to be, the Court is presented with three options. One alternative is to retain the rule of *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923), which requires the exclusion of scientific evidence unless based on principles "generally accepted" by the scientific community. Another alternative is for the Court to craft a new test for district judges, much as the Third Circuit did in *United States v. Downing*, 753 F.2d 1224 (3d Cir. 1985). Or, the Court could embrace the position of Petitioners, and leave the admissibility of expert testimony to the *ad hoc* discretion of the district court under Rule 403.

This Court has made clear that statutes, including the Federal Rules of Evidence, are not to be construed to abrogate a common-law rule absent clear indications to the contrary. Since the rule of *Frye* was concededly the dominant rule at the time the Rules were adopted in 1975, *see* Pet. Br. 28, and there is no indication that Congress intended to alter that rule, the Rules should be construed to embody *Frye*. The history of the Federal Rules of Evidence supports the view that the framers intended the dominant *Frye* rule to continue.

In fact, one of the drafters' principal sources for drafting Rule 403 indicates that they understood *Frye* to be an application of that rule. The other two alternative approaches to unreliable expert testimony are simply inconsistent with the Rules. In any event, *Frye* reflects sound policy, and the other two approaches do not. *Frye* should not be changed except by amendment of the Federal Rules.

ARGUMENT

I. THE TEXT OF THE FEDERAL RULES OF EVIDENCE, THE RULES' HISTORY, AND THE UNIFORM ADHERENCE TO *FRYE* BEFORE THE PROMULGATION OF THE RULES ALL LEAD TO THE CONCLUSION THAT THE FEDERAL RULES INCORPORATED THE *FRYE* STANDARD.

A. The History Of Expert Testimony Shows That Its Reliability Has Always Been A Special Concern

In the early days of the common law in England, expert witnesses were unheard of; instead, where questions involving a special skill or technique were presented, the courts empaneled "special juries," which were made up of those familiar with the technical issues. For instance, where a tradesman was accused of improperly tanning hides, a special jury of tanners was empaneled.[1] "[T]he practice was well established in the fourteenth century of having the issue actually decided by people especially qualified." Learned Hand, *Historical and Practical Considerations Regarding Expert Testimony*, 15 Harv. L. Rev. 40, 42 (1901).

Thus, in cases involving a specialized discipline, there was no need to assure that the evidence was reliable before it went to the jury, because the jury itself was made up of a body of the people best suited to determine the reliability of the technical evidence. The present method, of using special witnesses to present their expertise to a lay jury, evolved from this practice, and had its earliest origins in the mid-fourteenth century. *Id.* However, the shift from expert juries to expert witnesses came at a price: No longer could the court ask the fact-finder to use its own expert knowledge to decide the case. Instead, the lay jury would have to rely on the expert

[1] Henry Thomas Riley, *Memorials of London and London Life in the 13th, 14th and 15th Centuries* 135, 420 (1868).

witness, but at the same time would lack the qualifications to determine the reliability of the expert.

As Judge Hand pointed out in 1901, "the expert is an anomaly," *id.* at 50, because he is simultaneously an authority in an area beyond the jury's comprehension, as well as a "witness" like any other.[2] With lay witnesses, a lay jury is expected to draw upon its collective knowledge "of the common affairs of life," *Sioux City & P. R.R. v. Stout*, 84 U.S. (17 Wall.) 657, 664 (1873), in order to determine credibility. But lay jurors cannot be expected to do the same when the credibility of an expert's opinion is at issue; there, "[t]he question should not turn simply on the external indicia of 'credibility'—as if some ordinary fact like the date of a telephone conversation were involved." *Julie Research Labs., Inc. v. Guildline Instruments, Inc.*, 501 F.2d 1131, 1133-34 (2d Cir. 1974).[3] The risks to litigants caused by unreliable expert testimony are serious. As Judge Weinstein has noted, experts can be found "to testify to the truth of almost any factual theory, no matter how frivolous, thus validating the case sufficiently to avoid summary judgment and force the matter to trial." Jack B. Weinstein, *Improving Expert Testimony*, 20 U. Rich. L. Rev. 473, 482 (1986). The cost of unreliable testimony is enormous: By forcing even the most tenuous cases to trial,

[2] A more recent commentator has also addressed the anomaly, noting that since "experts are called upon to draw inferences that are beyond the competence of ordinary people," lay juries cannot draw upon their traditional tools for making credibility determinations—because they are *lay* juries, they are by definition "incompetent to evaluate [the expert's] arguments." Samuel R. Gross, *Expert Evidence*, 1991 Wis. L. Rev. 1113, 1181.

[3] "Our reliance on lay juries to access the credibility of technical experts is not a problem, of course, if one is willing to assume that something magical happens in the jury room so that ordinary people can suddenly unravel complex technical and scientific issues that would baffle the rest of us." E. Donald Elliott, *Toward Incentive-Based Procedure: Three Approaches for Regulating Scientific Evidence*, 69 B.U. L. Rev. 487, 492 n.22 (1989).

the results are increased costs of litigation, enhanced risks of unjust results (which present virtually no ground for appeal), and an overburdened court system. Because of these concerns, it is universally accepted that the trial judge must impose some limits on the admissibility of expert testimony presented to a jury.

B. Rule 403 Of The Federal Rules Of Evidence Was Designed To Limit The Admissibility Of Unreliable Testimony, Including Expert Testimony.

This longstanding concern with the reliability of scientific expert testimony is reflected in the Federal Rules of Evidence. While there are several of the Federal Rules of Evidence that have been invoked to impose limitations on unreliable expert testimony,[4] this *amicus* agrees that the limitation is to be found in Rule 403 of the Federal Rules of Evidence, and that Rule 403 applies to the testimony of expert witnesses. Rule 403 provides:

> Although relevant, evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence.

Where Petitioners and the Chamber diverge is in the interpretation of Rule 403. The Chamber believes that Rule 403 incorporates the so-called *Frye* rule—the long-

[4] For instance, Rule 702 has been read to impose a limitation on the admissibility of expert testimony. That rule reads:

> If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise.

This Rule should be read to impose the same limits on expert testimony as *Frye* and Rule 403. Under Rule 702, evidence which is not "generally accepted" by the relevant scientific community is simply not the "scientific knowledge" required by the Rule.

standing requirement that the principle "have gained general acceptance in the particular field . . . ." 293 F. at 1014. *Frye*'s theory is that if scientists would not rely upon the scientific "facts" being offered, there is no reason to allow lay jurors the chance to rely upon those so-called "facts."

The convergence between Rule 403 and *Frye* is obvious. The *Frye* rule proves to be nothing more than a recognition that "science" that is on the fringes, and has not been tested to the point of general acceptance across its disciplinary community, is always too potentially confusing, misleading, and prejudicial to be admitted, even if somewhat probative. Indeed, science that is on the fringes and thus unreliable satisfies *all* of the counterweights to probative value enumerated in Rule 403. Where the science is unreliable, there is a great possibility of *prejudice* to the opponent of that evidence, since the jury could possibly base its verdict on the unreliable evidence.[5] It would be *confusing* for the jury to hear the unreliable evidence, since scientific evidence is inherently complex, and the potential for confusion is increased exponentially when the jury has to assess whether the basic underlying principles are correct or incorrect. And, importantly, unreliable expert testimony would be potentially *misleading* for the jury, since science not "generally accepted" has an enhanced risk of being wrong.

As Professor Graham has noted, the *Frye* rule "merely states the conclusion derived from repeated application of Rule 403, that unless [the scientific technique has gained acceptance], its probative value simply cannot justify its potential for prejudice."[6] The Supreme Court of West

[5] *Accord* Fed. R. Evid. 403 Advisory Committee's Note (" 'Unfair prejudice' within its context means an undue tendency to suggest decision on an improper basis.").

[6] Michael H. Graham, *Handbook of Federal Evidence* § 703.2, at 656 (3d ed. 1991) (brackets in original; emphasis removed).

Virginia, interpreting Rules 403 and 702 of the Uniform Rules of Evidence, has similarly understood the relationship between the *Frye* rule and Rule 403 balancing:

> Certainly a test clothed with all the trappings of science, but which is not scientifically accepted, is more misleading or prejudicial than it is probative. Pseudo-science is more dangerous than no science at all. Therefore, at the end of the day we are all brought back essentially to the *Frye* rule with regard to tests that are not generally accepted . . . .

State v. Woodall, 385 S.E.2d 253, 259-60 (W. Va. 1989).[7]

While Rule 403 and *Frye* are similar in their goals, Rule 403, of course, does not explicitly adopt the *Frye* rule. However, "[b]ecause the Federal Rules of Evidence are a legislative enactment, we turn to the 'traditional tools of statutory construction,' . . . in order to construe their provisions." *Beech Aircraft Corp. v. Rainey*, 488 U.S. 153, 163 (1988) (quoting *INS v. Cardoza-Fonseca*, 480 U.S. 421, 446 (1987)). In cases where Congress is "working old ground" such as the common law, "the normal rule of statutory construction is that if Congress intends for legislation to change the interpretation of a judicially created concept, it makes that intent specific." *Midlantic Nat'l Bank v. New Jersey Dep't of Envtl. Protection*, 474 U.S. 494, 501 (1986). In other words, where a statute is enacted in the light of a common-law rule, that rule is deemed to survive absent clear evidence to the contrary.

This Court has twice specifically confirmed the same principle in the context of the Federal Rules of Evidence. In *Green v. Bock Laundry Machine Co.*, 490 U.S. 504,

[7] "Evidence that does not qualify under *Frye* must be excluded because, '[t]he prejudicial effect of an aura of scientific respectability outweigh[s] the slight probative value of the evidence.'" *United States v. Gillespie*, 852 F.2d 475, 480 (9th Cir. 1988) (quoting *United States v. Solomon*, 753 F.2d 1522, 1526 (9th Cir. 1985)).

521-22 (1989), the Court read the Federal Rules to preserve the common-law right of all litigants to impeach witnesses by introducing evidence of a prior crime. Rule 609(a)(1), by its literal terms, allowed impeachment of testimony in civil cases only of "the defendant." The Court concluded that "[a] party contending that legislative action changed settled law has the burden of showing that the legislature intended such a change." *Id.* In *United States v. Abel*, 469 U.S. 45 (1984), a unanimous Court also held that impeachment of a witness for bias was permissible under the Federal Rules. As the Court noted, "the Rules do not by their terms deal with impeachment for 'bias,' although they do expressly treat impeachment by character evidence and conduct, Rule 608, by evidence of conviction of a crime, Rule 609, and by showing of religious beliefs or opinion, Rule 610." *Id.* at 49. However, the law before the Federal Rules of Evidence were promulgated unanimously allowed impeachment for bias. *Id.* at 50. Since there was a unanimity of common-law precedent, the Court found that even though the Rules were silent on the issue of impeachment for bias, it was "unlikely" that the drafters of the Federal Rules of Evidence "intended to scuttle entirely the evidentiary availability of cross-examination for bias." *Id.* The Court thus held that "it is permissible to impeach a witness by showing his bias under the Federal Rules of Evidence just as it was permissible to do so before their adoption." *Id.* at 51.

The principle to be derived from *Green* and *Abel* is that, where the Rules are silent on the retention of a common-law evidentiary rule, the common-law rule nonetheless can, and should, survive if it is consistent with the Rules. *Frye* plainly meets that standard.

C. At The Time That The Federal Rules Were Adopted In 1975, The Federal Courts Uniformly Adhered To The *Frye* Rule.

Petitioners agree that *Frye* was the dominant standard at the time the Federal Rules were adopted. Pet. Br. 38.[8] In *Frye v. United States*, 293 F. 1013, the trial court had refused to admit "lie detector" evidence which allegedly would have indicated defendant's innocence. The Court of Appeals agreed that such evidence had been properly excluded, because lie detector technology was too experimental and untested to risk submitting to a jury:

> Just when a scientific principle or discovery crosses the line between the experimental and demonstrable stages is difficult to define. Somewhere in this twilight zone the evidential force of the principle must be recognized, and while courts will go a long way in admitting expert testimony deduced from a scientific principle or discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs.

Id. at 1014. The court thus recognized that "the best test of truth is the power of the thought to get itself accepted" in the marketplace of ideas, *i.e.*, the scientific community.[9]

Four years after *Frye* was decided, Professor McCormick called it "the only decision on the point that has come to my attention." Charles T. McCormick, *Deception-Tests and the Law of Evidence*, 15 Cal. L. Rev. 484, 499 (1927). Thereafter, every circuit to face the issue of the admissibility of scientific expert testimony before the passage of the Federal Rules of Evidence followed the *Frye* rule. By July 1, 1975, when the Federal

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[8] *See also* Br. *Amicus Curiae* of A Group of American Law Professors 6.

[9] *Abrams v. United States*, 250 U.S. 616, 630 (1919) (Holmes, J., dissenting).

Rules of Evidence became law, *Frye* had been embraced by six of the then eleven judicial circuits: the D.C.,[10] Fifth, [11] Sixth,[12] Eighth,[13] Ninth,[14] and Tenth [15] Circuits. *Frye* also had never been rejected by any federal circuit when the Federal Rules of Evidence were adopted. Indeed, when the Federal Rules were adopted, there was no competing rule in the federal courts for the admission or exclusion of scientific evidence.

The *Frye* rule was also overwhelmingly followed by the states before the Federal or Uniform Rules of Evidence were promulgated. In *Reed v. State*, 391 A.2d 364, 368 (Md. 1978), the Court of Appeals of Maryland surveyed the states that had "considered the question of the admissibility of scientific evidence," and concluded that the *Frye* rule "has come to be the standard in almost all of the courts in the country" to have considered the question. *Id.* (citing cases). Even Petitioners and one *amicus curiae* recognize that the *Frye* test was "notorious," Pet. Br. 28, and "dominant," [16] in 1975.

D. The Framers Of The Federal Rules Of Evidence Did Not Reject The *Frye* Rule.

The language and history of the Federal Rules do not evidence any rejection of the then-unanimous view that the rule of *Frye* was the appropriate rule for dealing with the admissibility of expert scientific evidence.

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[10] *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923).

[11] *United States v. Frogge*, 476 F.2d 969, 970 (5th Cir.), *cert. denied*, 414 U.S. 849 (1973).

[12] *United States v. McDevitt*, 328 F.2d 282, 284 (6th Cir. 1964).

[13] *McCroskey v. United States*, 339 F.2d 895, 897 (8th Cir. 1965).

[14] *Lindsey v. United States*, 237 F.2d 893, 896 (9th Cir. 1956).

[15] *Marks v. United States*, 260 F.2d 377, 382 (10th Cir. 1958), *cert. denied*, 358 U.S. 929 (1959).

[16] Br. *Amicus Curiae* of A Group of American Law Professors 6.

The Federal Rules of Evidence were the product of a debate between two views of how properly to codify the law of evidence. One school, the one most nearly followed by the Federal Rules of Evidence, took the position that a codification of evidence law should serve to compile and condense the existing rules. 21 Charles Alan Wright & Kenneth W. Graham, Jr., *Federal Practice and Procedure* § 5005, at 63 (1977). The other, more "radical" view was that codification should completely reshape the law. The latter, of course, required a much more comprehensive effort.

The first major effort to draft a code of evidence in this century was the American Law Institute's (ALI) Model Code of Evidence, and there, "[t]he issue which first divided the Reporter and the Chief Consultant concerned the form of the Code. One possibility was a very condensed set of rules like the Federal Rules of Civil Procedure, a format [urged] by Judge Charles E. Clark, the draftsman of the Federal Rules [of Civil Procedure]." *Id.* at 85. The other option was the one advocated by Dean Wigmore, who "wanted to follow the example of his own Code of Evidence, a set of finely detailed rules that ran to over five hundred pages." *Id.* at 86 (footnotes omitted). A middle ground between the two extremes was embraced by the finished ALI Model Code. *Id.*; *see generally* ALI, *Model Code of Evidence* (1942).

The ALI Model Code "did not catch on as a vehicle for reform. Although it was cited in a few appellate opinions, it was never seriously considered for adoption by any state except Nebraska," 21 Wright & Graham, *supra*, § 5005, at 88-89, perhaps because of the unsatisfactory nature of the compromise it sought to make. As a result, "the baton of reform" was passed to the National Conference of Commissioners on Uniform State Laws (NCCUSL). *Id.* at 89. The NCCUSL took as its outline the ALI Model Code, but followed a much less radical course: "The only sort of reform that was found

compatible with the goal of acceptability was the elimination of 'obsolete and unsound relics' of the past." *Id.* at 90 (quoting Spencer Gard, *The New Uniform Rules of Evidence*, 2 Kan. L. Rev. 333, 341 (1954)). The result was a set of rules, issued in 1953, which were much "closer to the brevity and simplicity that Judge Charles Clark had advocated for the Model Code" than to the comprehensiveness advocated by Wigmore. 21 Wright & Graham, *supra*, § 5005, at 90-91.[17]

On March 13-14, 1961, Chief Justice Warren appointed a "Special Committee on Evidence" to consider whether or not uniform federal rules of evidence were feasible. The Special Committee, nine months later, concluded that uniform rules were both desirable and feasible, and should be undertaken through the rulemaking process, because a "comprehensive, thorough and consistent revision cannot be obtained through scattered decisions." [18] In support of this observation, the Special Committee cited *Michelson v. United States*, 335 U.S. 469, 486 (1948), where the Court said that, since it could "make only infrequent sallies into the field" of evidence, it would not adopt a new rule of evidence which was largely rejected at common law.[19] The Special Committee also concluded that the Uniform Rules of Evidence should be adapted to create the new Federal Rules of Evidence.[20]

The drafters and framers of the Federal Rules of Evidence did just that, opting for a "handy pamphlet"

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[17] The goal of the Uniform Rules "was 'to express the rules in simple language and in convenient usable form,' a goal easier to reach when one is simply stating a system everyone knows than when one is striving to set forth a new set of rules." 21 Charles A. Wright & Kenneth W. Graham, Jr., *Federal Practice and Procedure* § 5005, at 90-91 (1977) (quoting Spencer Gard, *The New Uniform Rules of Evidence*, 2 Kan. L. Rev. 333, 338 (1954)).

[18] *A Preliminary Report on the Advisability and Feasibility of Developing Uniform Rules of Evidence for the United States District Courts*, 30 F.R.D. 73, 115 (1962) ("*Advisability and Feasibility*").

[19] *See id.* at 116.

[20] *Id.* at 110-13.

form modeled on the Uniform Rules.[21] The Rules were meant to be complete, but not comprehensive in the style of Wigmore. When the Advisory Committee first set to its task, it decided to "strike a middle course between vague generalities and constricting particularity."[22] A Preliminary Draft of the Federal Rules of Evidence was published and circulated for public comment in March 1969. Numerous changes were suggested by the bench and bar, leading to a "Revised Draft," which, after further changes, was approved by the Judicial Conference, promulgated by the Court and sent to Congress pursuant to the Rules Enabling Act.[23]

But these Rules were held up by Congress, which was principally concerned with the privilege rules in Article V.[24] As a result, the Federal Rules of Evidence were ultimately not promulgated through the rulemaking processes, as were the Federal Rules of Civil and Criminal Procedure, but as a traditional bill. The result was the Federal Rules of Evidence, which have governed evidence in federal trials since July 1, 1975, and which exist today in virtually the same form, with the exception of a few technical changes made since 1975.

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[21] *See Proposed Rules of Evidence: Hearings Before the Subcomm. on Reform of Federal Criminal Laws of the House Comm. on the Judiciary*, 93d Cong., 1st Sess. 34 (1973) (testimony of Albert Jenner, Jr., Chairman of the Advisory Committee) (*"Hearings Before the Subcomm. on Reform of Federal Criminal Laws"*).

[22] *Id.* at 91 (testimony of Professor Edward W. Cleary, Reporter to the Advisory Committee).

[23] 21 Wright & Graham, *supra* n.17, § 5006, at 100, 101.

[24] The result was that the proposed rules on privilege gave way to the Congressionally-drafted Fed. R. Evid. 501, which now states that privilege "shall be governed by the principles of the common law as they may be interpreted by the courts of the United States in the light of reason and experience." In cases where state law supplies the rule of decision, privilege "shall be determined in accordance with State law."

There is no indication that either the Advisory Committee or Congress intended to scrap the "notorious" and "dominant" *Frye* rule. The Advisory Committee's Notes,[25] the legislative history,[26] as well as the minutes of the meetings held by the Advisory Committee on Evidence[27] are devoid of any suggestion that *Frye* was being repealed.

Numerous commentators have understood this silence as retaining the *Frye* rule under the Federal Rules of Evidence. Professors Saltzburg and Martin have concluded that "it was highly unlikely the Advisory Committee and the Congress intended to overrule the vast majority of cases excluding such evidence as lie detectors without explicitly stating so." 2 Steven A. Saltzburg & Michael M. Martin, *Federal Rules of Evidence Manual* 15 (5th ed. 1990). *See also* 1 David Louisell & Christopher Mueller, *Federal Evidence* § 105, at 818 (1977); Michael H. Graham, *supra*, § 703.2, at 655.[28] Even the leading case purporting to depart from the *Frye* standard,

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[25] *See Rules of Evidence for United States Magistrates: Amendments*, 56 F.R.D. 183 (1973); *Revised Draft of Proposed Rules of Evidence for the United States Courts and Magistrates*, 51 F.R.D. 315 (1971) (earlier draft); *Preliminary Draft of Proposed Rules of Evidence for the United States District Courts and Magistrates*, 46 F.R.D. 161 (1969).

[26] *See* H.R. Conf. Rep. No. 1597, 93d Cong., 2d Sess. (1974), *reprinted in* [1974] U.S.C.C.A.N. 7098; H.R. Rep. No. 650, 93d Cong., 1st Sess. (1973), *reprinted in* [1974] U.S.C.C.A.N. 7075; S. Rep. No. 1277, 93d Cong., 2d Sess., *reprinted in* [1974] U.S.C.C.A.N. 7051; *Rules of Evidence: Hearings on H.R. 5463 Before the Senate Comm. on the Judiciary*, 93d Cong., 2d Sess. (1974); *Hearings Before the Subcomm. on Reform of Federal Criminal Laws.*

[27] *See, e.g., Minutes of Meeting—Advisory Committee on Evidence* 30-39 (Feb. 3-5, 1966).

[28] Judge Weinstein and Professor Berger appear to draw the opposite conclusion, but do so in equivocal language: the "silence of [Rule 702] and its drafters *may arguably be regarded as tantamount to* an abandonment of the general acceptance standard." 3 Jack B. Weinstein & Margaret A. Berger, *Weinstein's Evidence* ¶ 702[03], at 702-36 (1992) (emphasis added).

United States v. Downing, 753 F.2d 1224, 1235 (3d Cir. 1985), agreed that the Federal Rules of Evidence did not repudiate *Frye*.[29]

The absence of any suggestion that *Frye* should be abolished is, under this Court's decisions, more than sufficient to preserve *Frye*. But there is more. First, the drafters of the Federal Rules of Evidence specifically confirmed that they were not seeking to entirely rewrite the law of evidence.[30] As the Reporter of the Advisory Committee wrote, "The legal background against which the Rules were drafted and enacted was a vast collection of common law precedents. . . . Thus the Rules were working old ground, and ground that was near and dear to much of the profession."[31] As this Court noted in *Abel*, it was clear that the framers intended that "the body of common law knowledge continue to exist [as] a source of guidance in the exercise of delegated powers." *United States v. Abel*, 469 U.S. at 51-52 (quoting Edward W. Cleary, *Preliminary Notes on Reading the Rules of Evidence*, 57 Neb. L. Rev. 908, 915 (1978)) (internal quotations omitted).

Second, in the few instances where the drafters departed from a traditional common-law rule, they made

[29] The McCormick treatise also argues against retention of the *Frye* rule, but does so based on "policy" concerns, not the text of the Federal Rules. *See* 1 *McCormick on Evidence* § 203, at 874 (4th ed. 1992).

[30] *See Advisability and Feasibility*, 30 F.R.D. at 110.

[31] Edward W. Cleary, *Preliminary Notes on Reading the Rules of Evidence*, 57 Neb. L. Rev. 908, 909 (1978). *See also* 10 James William Moore & Helen I. Bendix, *Moore's Federal Practice* § 1, at 5 (2d ed. 1988) ("The Federal Rules of Evidence are rooted in the past. . . . There is nothing revolutionary about them."). The Chairman of the Advisory Committee, Albert E. Jenner, Jr., expressed similar views in hearings before the House of Representatives, stating that the Committee was not "inclined to give the family jewels away or tip or rock the laws of evidence." 21 Wright & Graham, *supra* n.17, § 5006, at 99.

their intent clear. For instance, Fed. R. Evid. 607 allows the credibility of a witness to be attacked by any party, a departure from common law. The first sentence of the Advisory Committee's Note reads: "The traditional rule against impeaching one's own witness is abandoned as based on false premises." Similar language appears where other common-law rules were discarded.[32] There is no similar language discarding, or even relaxing, the *Frye* rule.

Third, the drafters of the Federal Rules specifically contemplated that the principles of Rule 403 would be embodied in specific rules. Rule 403 is described by the Advisory Committee's Note as "designed as a guide for the handling of situations for which no specific rules have been formulated," noting that the "rules which follow in this Article are concrete applications evolved for particular situations." In other words, Rule 403 articulates a general principle that may be embodied in a specific rule, such as *Frye*.

Finally, the Advisory Committee's Note to Rule 403 suggests that the drafters were aware of *Frye*, and believed it to be relevant to Rule 403. In framing Rule 403, the drafters relied on Professor Herman L. Traut-

[32] *See also* Fed. R. Evid. 613(a) Advisory Committee's Note ("The rule abolishes this useless impediment"); Fed. R. Evid. 613(b) Advisory Committee's Note (requirement that an impeaching statement be shown to the witness before it can be proved by extrinsic evidence "is preserved but with some modifications"); Fed. R. Evid. 704 Advisory Committee's Note ("the so-called 'ultimate issue' rule is specifically abolished by the instant rule"); Fed. R. Evid. 705 Advisory Committee's Note (eliminating requirement of preliminary disclosure of facts and data underlying expert opinion); Fed. R. Evid. 804(b)(3) Advisory Committee's Note ("The exception discards the common law limitation and expands to the full logical limit"); Fed. R. Evid. 804(b)(4) Advisory Committee's Note ("The general common law requirement that a declaration in this area must have been made *ante litem motam* has been dropped"); Fed. R. Evid. 1001 Advisory Committee's Note (relaxing the "best evidence rule").

man's seminal article, *Logical or Legal Relevancy—A Conflict in Theory*, 5 Vand. L. Rev. 385 (1952). Professor Trautman's article addresses the "Conflict in Theory" between "logical relevancy," which is the tendency of Fact A to prove the existence of Fact B, *id.* at 385, and "legal relevancy," which allows the exclusion of otherwise logically-relevant evidence based on "considerations of policy." *Id.* at 395-96. The Federal Rules of Evidence retain this distinction in Rule 401, the "logical relevancy" rule, and Rule 403, the "legal relevancy" rule.

Importantly, Professor Trautman's article includes an extended discussion of the *Frye* rule. *Id.* at 395-96 & n.37. He saw *Frye* as a product of a "legal relevancy" inquiry, which would now take place under Rule 403. Indeed, he conceded that lie detector tests (the issue in *Frye*) would be logically relevant, but that "considerations of policy (perhaps a judicial fear of undue prejudice in the minds of the jury resulting from a lack of proper administrative standards for controlling the competency of the operator, the type of machine used and the circumstances under which it is used)" provided a "rational basis" for exclusion. *Id.* at 396. Thus, Professor Trautman's article is the only available evidence that the framers considered the *Frye* rule, and it clearly indicates that they thought *Frye* to be an appropriate product of a Rule 403 inquiry.

The design and history of the Federal Rules thus plainly support the preservation of *Frye*.[33] They are also directly inconsistent with Petitioners' view that Rule 403 authorizes only *ad hoc* balancing. Indeed, as Petitioners have themselves advocated, "one of Congress's most funda-

[33] Any suggestion that the framers of the Rules believed it was impracticable to ascertain the relevant scientific community and its views is contradicted by Rule 703, which allows an expert to base his opinion upon facts or data "reasonably relied upon by experts *in the particular field* in forming opinions or inferences upon the subject," even though the facts or data are not admissible in evidence. (emphasis added).

mental policy choices in enacting the Federal Rules of Evidence [was] its desire to bring *uniformity* to federal evidence law." Pet. Cert. 16 (emphasis in original). Applying *ad hoc* balancing to scientific expert testimony would create even more disparity than the current circuit conflict over *Frye*: Instead of varying among the circuits, the admissibility of scientific expert testimony could vary on a district judge-by-district judge basis or even a case-by-case basis.

E. The Mechanism For Changing An Established Rule Of Evidence Is The Rulemaking Process.

The other alternative approach to unreliable expert testimony—the drafting of a new Rule in the adjudicatory context—is also inconsistent with the design of the Federal Rules. If the *Frye* rule is to be changed, it should be changed through either the legislative or the rulemaking processes, not through adjudication. When the Federal Rules were adopted in 1975 this legislative approach was seen as far preferable to judicial rulemaking.[34] The very premise of the Federal Rules was that revision in the laws of evidence "cannot be obtained through scattered decisions." [35]

There is little question that a mechanism is available to make changes in the Federal Rules of Evidence through the Rules Enabling Act. Indeed, the Standing Committee within the last year has considered changes in the Rules concerning the admissibility of expert testimony. The Advisory Committee on Civil Rules approved, with one member dissenting, a "controversial" amendment to Rule 702 that was "intended to limit the use, but increase the utility and reliability, of party-initiated opinion tes-

[34] *See, e.g., Advisability and Feasibility*, 30 F.R.D. at 100-05.

[35] *Id.* at 115. "Improvements in evidence law ha[ve] to come through codification. . . ." Thomas M. Mengler, *The Theory of Discretion in the Federal Rules of Evidence*, 74 Iowa L. Rev. 413, 429 (1989).

timony bearing on scientific and technical issues." [36] As proposed, Rule 702 would have required that the testimony be "reasonably reliable" and "substantially assist" the trier of fact.[37] However, the Standing Committee on Rules of Practice and Procedure, the last step before transmission to the Judicial Conference of the United States, demurred. Instead, the Standing Committee "[e]ndorsed a request to the Chief Justice that he reactivate an Advisory Committee on the Federal Rules of Evidence" and "appoint a reporter to serve the reactivated Evidence Rules Committee." [38] The Chief Justice has done so, and Judge Ralph K. Winter of the Second Circuit has been appointed chairman. With the revitalization of an evidence committee, it is to be expected that a more active dialogue among bench, bar, and academia concerning the Rules will take place. Changes in the Rules of Evidence should originate with that committee and be enacted through the rulemaking process rather than adopted in the context of adjudication.

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[36] Committee on Rules of Practice and Procedure of the Judicial Conference of the United States, *Preliminary Draft of Proposed Amendments to the Federal Rules of Civil Procedure and the Federal Rules of Evidence*, Committee Notes (1991). *See also* Letter from Hon. Sam C. Pointer, Chairman, Advisory Committee on Civil Rules to Hon. Robert E. Keeton, Chairman, Standing Committee on Rules of Practice and Procedure, Attachment B, at 14 (May 1, 1992).

[37] While the Proposed Advisory Committee's Note to Proposed Rule 702 correctly stated that "the admissibility of such evidence is, and remains, subject to the general principles of 403," it curiously went on to assert that the Proposed Rule "does not mandate a return to the strictures of *Frye v. United States*." There is no support provided for the apparent assumption that *Frye* has been eliminated, and the Committee Notes to an unenacted Rule are entitled to no deference. *Cf. Puerto Rico Dep't of Consumer Affairs v. Isla Petroleum Corp.*, 485 U.S. 495, 501 (1988).

[38] Judicial Conference of the United States, *Preliminary Report, Judicial Conference Actions* at 8 (Sept. 22, 1992).

II. EVEN IF THE *FRYE* RULE WERE NOT REQUIRED BY THE FEDERAL RULES, IT SHOULD BE FOLLOWED BY THIS COURT BECAUSE IT IS THE BEST AVAILABLE ALTERNATIVE FOR EXCLUDING UNRELIABLE EXPERT TESTIMONY.

Even if the *Frye* rule were not compelled by the Federal Rules of Evidence, it should be followed by this Court. Of the three options available to this Court—the *Frye* rule, a new test, or *ad hoc* balancing—*Frye* is by far the preferable alternative. It is the standard most familiar to judges and litigants, and it provides the most appropriate standard for the balancing required by Rule 403.

A. The *Frye* Rule.

As Professor Cleary has aptly noted, "Evidence, more than any other field of law, calls for making decisions on the run." [39] As the long-standing rule for the admissibility of scientific expert testimony, the federal courts are intimately familiar with the *Frye* rule, and they have repeatedly utilized its "general acceptance" standard to exclude unreliable scientific testimony. But there is far more to recommend the *Frye* rule than the federal courts' longstanding familiarity. The *Frye* rule has the advantage of making it unnecessary for the courts themselves to determine whether particular scientific expert testimony is reliable or unreliable, a task that judges are often ill-equipped to undertake in this age of increasing scientific complexity. Rather, the *Frye* rule focuses the attention of the courts where it belongs—on the question of general acceptance in the scientific community.[40]

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[39] *Hearings Before the Subcomm. on Reform of Federal Criminal Laws* at 547 (testimony of Professor Edward W. Cleary, Reporter to the Advisory Committee).

[40] Moreover, the *Frye* rule, by requiring a "general acceptance" in the relevant scientific community, assures that there will be an adequate pool of rebuttal experts for the opposing party to draw

The *Frye* rule also ensures consistency in the law of evidence. Instead of creating a situation in which each judge in each case will make an *ad hoc* determination of admissibility, it ensures consistency. For instance, if the Ninth Circuit had concluded in one case that the opinion of an "accidentologist," based on the statements of bystanders, was unreliable proof of the point of impact in a suit arising out of an automobile collision,[41] the next district court asked to admit the testimony of an "accidentologist" would be required to exclude it.

Finally, the *Frye* rule is flexible and allows for change as the state of scientific knowledge changes. A ruling in one case that certain scientific evidence is inadmissible does not foreclose the possibility that the evidence could be admitted in a future case. Perhaps the best illustration of *Frye*'s contribution to the "growth and development of the law of evidence," Fed. R. Evid. 102, is seen by comparing *Frye* with *United States v. Piccinonna*, 885 F.2d 1529 (11th Cir. 1989) (en banc). In *Frye*, the District of Columbia Circuit concluded that lie detectors had not gained sufficient general acceptance in scientific arenas to assure the court of their reliability. In *Piccinonna*, however, the Eleventh Circuit revisited the question of admissibility "[i]n the wake of new empirical evidence and scholarly opinion which have undercut many of the traditional arguments against admission of polygraph evidence," *id.* at 1533, and concluded that polygraph evidence could be admitted at trial.[42]

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upon. *See, e.g., United States v. Addison*, 498 F.2d 741, 744 (D.C. Cir. 1974).

[41] The example is taken from Fed. R. Evid. 703 Advisory Committee's Note.

[42] Some have criticized the *Frye* rule as being an unduly "conservative" standard for evaluating science, a position which is embraced by various *amici*. For instance, *amici* Physicians, Scientists, and Historians of Science champion the "eccentrics" of science, such as Galileo, whose testimony would (presumably) have been excluded in his day because he challenged the "geocentric

The virtues of *Frye* have manifested themselves in the federal courts' virtually unflagging adherence to *Frye*, even after the passage of the Federal Rules of Evidence. Since the passage of the Federal Rules, even more circuits have embraced the *Frye* rule. The District of Columbia Circuit has continued to follow *Frye*.[43] The First Circuit has joined the ranks of the followers of *Frye*, relying upon it to exclude polygraph evidence in a civil case.[44] The Fourth Circuit, which Petitioners claim to have rejected *Frye*, *see* Pet. Br. 17 n.44, has nonetheless indicated that the admissibility of expert testimony is "dependent upon some degree of proven acceptance within the appropriate discipline."[45] The Fifth[46] and Sixth[47] Circuits still follow *Frye*. The Seventh Circuit, which prior to 1975 had not addressed the issue, has adopted *Frye* into its case law.[48] The Eighth Circuit recently said that it viewed Fed. R. Evid. 702 and *Frye* "as

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orthodoxy promoted by the Aristotelian scientists who dominated the academies and universities." Br. *Amici Curiae* of Physicians, Scientists, and Historians of Science 14-15. Admittedly, there is a cost in excluding expert testimony on the fringes, for time may ultimately prove it to be reliable. But, as the D.C. Circuit said in *United States v. Addison*, 498 F.2d at 743, "This is not to say . . . that the *Frye* standard exacts an unwarranted cost."

[43] *United States v. Shorter*, 809 F.2d 54, 59-61 (D.C. Cir.), *cert. denied*, 484 U.S. 817 (1987) ("*Frye* is still the law in this Circuit").

[44] *de Vries v. St. Paul Fire & Marine Ins. Co.*, 716 F.2d 939, 945 (1st Cir. 1983).

[45] *United States v. Gould*, 741 F.2d 45, 49 n.2 (4th Cir. 1984).

[46] *Christophersen v. Allied-Signal Corp.*, 939 F.2d 1106, 1110 (5th Cir. 1991) (per curiam) (en banc), *cert. denied*, 112 S. Ct. 1280 (1992).

[47] *United States v. Metzger*, 778 F.2d 1195, 1203 (6th Cir. 1985), *cert. denied*, 477 U.S. 906 (1986); *see also Sterling v. Velsicol Chem. Corp.*, 855 F.2d 1188, 1208 (6th Cir. 1988).

[48] *United States v. Smith*, 869 F.2d 348, 350-54 (7th Cir. 1989).

generally compatible and not as mutually exclusive." [49] The Ninth Circuit still continues to embrace *Frye*,[50] as does the Tenth Circuit,[51] and the *en banc* Eleventh Circuit relied on *Frye* in concluding that lie detectors had gained sufficient acceptance to be admissible in the district court's discretion.[52]

Most of the states which have adopted the Uniform Rules of Evidence also recognize the virtues of *Frye*. In fifteen of the states where the Uniform Rules of Evidence have been adopted, *Frye* still is the standard for the admissibility of expert scientific testimony.[53]

B. The Alternative "Tests".

A second option for this Court is to craft its own test for the exclusion of unreliable expert testimony, based on a variety of judicially-created "tests," as well as a number of alternatives proposed by commentators. However, it can quickly be seen that the available options have none of the virtues of the *Frye* test. They are not familiar to the vast majority of district judges. And they are much too complex for any district judge to utilize "on the run."

The difficulty with these tests is readily apparent. For example, in *United States v. Downing*, the Third Circuit divined a creative, "flexible" test for the admis-

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[49] *United States v. Two Bulls*, 918 F.2d 56, 60 n.7 (8th Cir. 1990), *appeal dismissed*, 925 F.2d 1127 (8th Cir. 1991).

[50] *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 951 F.2d 1128, 1129-30 (9th Cir. 1991), *cert. granted*, 113 S. Ct. 320 (1992); J.A. 238 (same).

[51] *United States v. Smith*, 776 F.2d 892, 898 (10th Cir. 1985).

[52] *United States v. Piccinonna*, 885 F.2d 1529, 1531-32 (11th Cir. 1989) (en banc).

[53] The states where the Uniform Rules of Evidence govern and *Frye* is still followed are listed, along with representative cases, in an Appendix to this Brief.

sibility of novel scientific evidence. In order for the district courts of the Third Circuit to determine whether scientific evidence is "reliable," and thus admissible the courts must follow the factors announced in this test:

> (1) Explicit identification of a relevant scientific community and an express determination of a particular degree of acceptance within that community.
>
> (2) The "novelty" of the new technique; that is, "its relationship to more established modes of scientific analysis."
>
> (3) The existence of a specialized literature dealing with the technique.
>
> (4) The qualifications and professional stature of expert witnesses, and the non-judicial uses to which the scientific technique is put.
>
> (5) The frequency with which a technique leads to erroneous results.
>
> (6) The district court may take judicial notice of expert testimony that has been offered in earlier cases to support or dispute the merits of a particular scientific procedure.
>
> (7) "Undoubtedly, other factors could be added to the list."

753 F.2d at 1238-39. The district court on remand in *Downing* was forced to write a comprehensive opinion addressing the *Downing* factors in order to conform to the Third Circuit's mandate. *See United States v. Downing*, 609 F. Supp. 784 (E.D. Pa. 1985), *aff'd mem.*, 780 F.2d 1017 (3d Cir. 1985).[54] In addition to its cumber-

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[54] Similarly, in *DeLuca v. Merrell Dow Pharmaceuticals, Inc.*, 911 F.2d 941 (3d Cir. 1990), the Third Circuit reversed and remanded the district court's grant of summary judgment for defendants, on the ground that the record did not support the exclusion of the plaintiffs' expert's testimony under the *Downing* test. On remand,

some nature, the *Downing* test is one which is not familiar to most district judges; indeed, it probably would never become familiar due not only to its prolixity, but also to its open-endedness. As "other factors" continue to be added to the list, the test will constantly change.

The test proposed by *amicus* The Carnegie Commission on Science, Technology and Government is no less cumbersome and complex, and threatens, like *Downing*, to turn courtrooms into research laboratories. The Carnegie Commission suggests that a three-pronged inquiry be adopted, involving (1) the testability of the "claim being put forth" by the expert, (2) whether the claim has been empirically tested, and (3) whether the testing has "been carried out according to a scientific methodology." Br. *Amicus Curiae* of the Carnegie Commission on Science, Technology and Government 11. Prong one would require courts to "identify the line of demarcation between science and non-science," a line which the Carnegie Commission concedes "Courts have rarely sought" to do. *Id.* at 12. Prongs two and three would require courts to inquire into the scientific testing of the expert's hypothesis, an inquiry that would require courts to venture into the laboratory to determine "whether appropriate testing occurred," *id.* at 17, as well as what constitutes "appropriate testing."

Some state courts and some commentators have also attempted to propose alternative tests. The results have been as complex as *Downing*, and in some instances even more so. Oregon, for example, has a seven-factor reliability "filtration" test, which was set out in *State v. Brown*, 687 P.2d 751, 759 (Or. 1984) (en banc). The Oregon test includes such factors as (1) the technique's

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the district court "conducted a hearing held on five separate days, followed by extensive post-hearing submissions of the parties, in order to determine whether Dr. Done's testimony is admissible under the criteria set forth in *United States v. Downing*." *DeLuca v. Merrell Dow Pharmaceuticals, Inc.*, 791 F. Supp. 1042, 1044 (D. N.J. 1992).

general acceptance, (2) the expert's qualifications and stature, (3) the use which has been made of the technique, (4) the potential rate of error, (5) the existence of specialized literature, (6) the novelty of the invention, and (7) the extent to which the technique relies on the subjective interpretation of the expert.

Another typical alternative to the *Frye* rule was suggested in a law review article. There, the commentator proposed an even more elaborate, *eleven*-factor analysis to guide trial judges in the admissibility of scientific evidence. Under this test, factors to be taken into account "include" (1) the potential error rate of the technique, (2) the existence and maintenance of standards governing its use, (3) the presence of safeguards in the characteristics of the technique, (4) analogies to other scientific techniques whose results are admissible, (5) the extent to which the technique has been accepted by scientists in the field involved, (6) the nature and breadth of the inference adduced, (7) the clarity and simplicity with which the technique can be described and its results explained, (8) the extent to which the basic data are verifiable by the court and jury, (9) the availability of other experts to test and evaluate the technique, (10) the probative significance of the evidence in the circumstances of the case, and (11) the care with which the technique was employed in the case. Mark McCormick, *Scientific Evidence: Defining a New Approach to Admissibility*, 67 Iowa L. Rev. 879, 911-12 (1982).

The available alternatives to the *Frye* rule are cumbersome, open-ended, multi-factor tests which are, to put it charitably, almost impossible to apply. Plainly, then, the adoption of a new substantive rule in place of *Frye* is wholly unsatisfactory.

C. "Ad Hoc, Case-Specific Balancing".

The last alternative to *Frye* is the one advocated by the Petitioners—"[*A*]*d hoc*, case-specific balancing." *See*,

e.g., Pet. Br. 38. Petitioners' solution to the problem of unreliable expert testimony is to leave such rulings to the largely unbridled discretion of the district court. Taken to its logical extension, Petitioners' position is that appellate cases decided under the Federal Rules of Evidence have no precedential value, because the district court writes on a clean slate every time it makes an evidentiary ruling. This approach is as wrong as it is unusual. Appellate courts routinely announce factors necessary to a trial court's exercise of discretion, and these factors necessarily cabin that discretion in future cases.[55]

Vesting *ad hoc*, unprincipled discretion in the decisionmaker does not lead to the "fairness" envisioned by Rule 102; on the contrary, it is the most likely course to injustice. Kenneth Davis, *Discretionary Justice: A Preliminary Inquiry* v (1971). The source of this unfairness is readily apparent. The litigants would have no meaningful recourse to higher authority. In an era of litigation explosion, a single product or a single event may generate multiple lawsuits in widely scattered geographic areas, and often the same scientific expert testimony is offered in many of these lawsuits, as has been the case with Bendectin. Under Petitioners' proposal, different federal judges would be free to reach opposite results in these cases, sometimes admitting the particular expert testimony and sometimes excluding it. This unjustifiable inconsistency not only denies fairness to the litigants, it

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[55] *See, e.g.*, Ruggiero J. Aldisert, *The Judicial Process* 753 (1976) ("guides to the exercise of discretion can easily crystallize into rules of law") (quoting Rupert Cross, *Precedent in English Law* 214-16 (2d ed. 1968)); Henry J. Friendly, *Indiscretion About Discretion*, 31 Emory L. Rev. 747, 772-73 (1982); *United States v. Criden*, 648 F.2d 814, 818 (3d Cir. 1981) ("although the selection of an appropriate remedy has been generally deemed to lie in the equitable discretion of the trial judge, after experience has accumulated the appellate courts may decide that a specific remedy should be awarded as a general rule.").

would strongly encourage forum shopping among the federal courts.[56]

As the Court of Appeals properly recognized here, "the answer to the question about the reliability of a scientific technique or process [should] not vary according to the circumstances of the case. It is therefore inappropriate to view this threshold question of reliability as a matter within each trial judge's individual discretion." J.A. 238-39 (internal quotation and citations omitted).

CONCLUSION

For the foregoing reasons, the judgment of the Court of Appeals should be affirmed.

Respectfully submitted,

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January 19, 1993

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[56] Congress's adoption of the *Frye* rule does not present any concerns under *Erie R. Co. v. Tompkins*, 304 U.S. 64 (1938). Where, as here, there is a valid federal statute or federal rule of procedure on point, that is the end of the inquiry—the federal law controls. *Burlington Northern R. Co. v. Woods*, 480 U.S. 1, 5 (1987) (Federal Rule of Appellate Procedure on point).

APPENDIX

Alaska: *Contreras v. State*, 718 P.2d 129, 135 (Alaska 1986) ("The *Frye* standard is essentially a 'prejudice-versus-probative value test,' similar to Evidence Rule 403.").

Arizona: *State ex rel. Collins v. Superior Court*, 644 P.2d 1266, 1282 (Ariz. 1982), *overruled on other grounds, State v. Nuney*, 660 P.2d 858 (Ariz. 1983) ("*Frye* has been in use for almost 60 years without the development of any alternative as a *general* test of reliability. No such alternative has been seriously suggested in the case or in the literature, nor does any occur to this court." (emphasis in original)).

Hawaii: *State v. Montalbo*, 828 P.2d 1274, 1280-81 (Hawaii 1992) (adopted as part of a "reliability" analysis).

Iowa: *State v. Klindt*, 389 N.W.2d 670, 672-73 (Iowa 1986) indicates that general acceptance is still relevant, although the reliability of evidence may be "otherwise established" as well. *State v. Hall*, 297 N.W.2d 80, 83-85 (Iowa 1980), *cert. denied*, 450 U.S. 927 (1981).

Louisiana: *State v. Armstrong*, 561 So.2d 883, 886-87 (La. Ct. App. 1990) (applying *Frye*). *But see State v. Catanese*, 368 So.2d 975, 980 (La. 1979) (calling *Frye* an "unjustifiable obstacle"; decided before Uniform Rules of Evidence were adopted in Louisiana).

Michigan: *People v. Young*, 340 N.W.2d 805, 813 (Mich. 1983).

Minnesota: *State v. Jobe*, 486 N.W.2d 407, 419 (Minn. 1992).

Nebraska: *State v. Houser*, 490 N.W.2d 168, 178, 184 (Neb. 1992).

New Hampshire: *State v. Vandebogart*, No. 92-016, 1992 N.H. Lexis 181 at *19, *23 (N.H. Nov. 20, 1992).

North Carolina: *State v. Pennington*, 393 S.E.2d 847, 852-53 (N.C. 1990) (*Frye* is one indication of reliability).

Oklahoma: *Rawlings v. State*, 740 P.2d 153, 161 (Okla. Crim. App. 1987) (once the witness is qualified under a Rule 702 "helpfulness" inquiry, there must then be proof that "the reliability of the tests used has gained general acceptance and recognition in the concerned scientific community").

Rhode Island: *State v. Dery*, 545 A.2d 1014, 1016-17 (R.I. 1988) (relied upon *Frye* to exclude polygraph results). *But see State v. Wheeler*, 496 A.2d 1382, 1387-89 (R.I. 1985) (arguably rejecting *Frye*; case decided one year before Uniform Rules were adopted in Rhode Island).

South Dakota: *State v. Wimberly*, 467 N.W.2d 499, 505 (S.D. 1991).

Washington: *State v. Ortiz*, 831 P.2d 1060, 1069 (Wash. 1992) ("background theory or principle [must have] achieved general acceptance in the scientific community").

West Virginia: *State v. Woodall*, 385 S.E.2d 253, 259-60 (W.Va. 1989).